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EXAMINER	
WANG, EUGENIA	
ART UNIT	PAPER NUMBER
1795	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)
	10/529,289	SUHARA ET AL.
	Examiner	**Art Unit**
	Eugenia Wang	1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 5-22* is/are pending in the application.

4a) Of the above claim(s) *2,6-15,17 and 19-21* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5,16,18 and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In response to the amendment received October 2, 2007:

a. Claim 4 has been cancelled as per Applicant's request, and claim 22 has been added. Claims 1-3 and 5-22 are currently pending with claims 2, 6-15, 17, and 19-21 being withdrawn as being drawn to an unelected invention.

b. The previous objection to the Abstract is withdrawn in light of the amendment.

c. The previous 112 rejections are withdrawn in light of the amendments.

d. The core of the previous rejection is maintained, with changes necessitated by the amendment. Thus this action is final.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2003-257416 (moriuchi et al.) in view of US 6103213 (Nakamura et al.) and WO 99/49528 (Matsumoto et al.). **NOTE: US 6617073, the English equivalent to WO 99/49528 is being relied upon as a translation.

As to claims 1, 16, and 18, Moriuchi et al. teach the use of Li-Co composite oxide materials used a positive electrode (abs). The materials used are a mixture of particles having two different mean sizes, the first particles having a mean particle size between 7-13 μm and the second particles having a mean particle size between 1-6 μm (abs). Furthermore, a ratio in which the two particle sizes are used is discussed: a ratio of 1:0.2 to 1.5 (abs). Most of the ratio range previously discussed fits that of the instant application, as can be easily compared by converting the ratios. The claimed range, if converted to be compared to 1 part of first particles is between 1:0.11 to 2 (since 9:1 / (9/9) = 1/0.11). The particle distribution of size D10 is 2 to 6 μm; the particle distribution of size D90 is 15 to 25μm (para 24). At least a portion of the size distributions fit that of

the range claimed by the instant application. For example, regarding D10 in comparison to D50 (the mean particle size), if D10 was from 5-6 μm and D50 was from 7-12 μm, D10 would be at least 50% of D50. Likewise, overlapping ranges for D90 to D50 comparisons. If D90 was from 15-18 μm and D50 was 12 μm, D90 would be no more than 150% of D50. Lastly, the particles used by Moriuchi et al. is substantially spherical shaped, as it is stated that the particles are assumed to be the projection image acquired by the exposure of laser light, a sphere with a circular cross section (para 0023, lines 7-12). Furthermore, Moriuchi et al. teach that the first particles have a size between 7-13 μm and that the second particles having a mean particle size between 1-6 μm (abs). Therefore the range taught by Moriuchi et al. encompasses most of range claimed by the instant application. Again, at least a portion of the size distributions fit within the relationship of the required by the instant application. For example a second particle size of 2 μm fits with a first particle size of the entire range of Moriuchi et al. (7-13 μm). Although an aspect ratio is not specifically mentioned in Moriuchi et al., the aspect ratio one of ordinary skill would expect that aspect ratio of the particles taught by Moriuchi et al. would be close to 1/1 (indicative of a spherical particle). This expectation can be made, as Moriuchi et al. only defines the particles with respect to the diameter, suggesting that the particle is spherical. Moreover, Moriuchi et al. suggests that the particles have a spherical shape, as the projection of light on the particles is used to obtain a circular image, wherein the diameter is used to measure a spherical equivalent diameter (para 0023). (**NOTE: For an alternate interpretation of the aspect ratio, see below for an obviousness statement.) Lastly, it is

noted that the material taught by Moriuchi et al. is used for a positive electrode for a lithium ion secondary battery (title) (as applied to claims 16 and 18).

However, it can be interpreted that Moriuchi et al.'s range of D10 and D90 compared to D50 covers a range outside of that claimed by the instant application (where D10 is at least 50% of D5 and where D90 is no more than 150% of D50). In this case, Nakamura et al. teach lithium-cobalt oxide particles with a narrow particle size distribution that is used as cathode substances for lithium ion batteries (abs). The motivation for having a uniform particle shape and particle size is for higher packing density, which helps obtain a higher battery capacity (col. 1, lines 63-67). Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to try to make particles that are nearly uniform in size to produce a battery with a higher packing density, which results in higher battery capacity. (Note: Although a small distribution is not defined, it is clear that a more uniform particle size is desirable, thus obviating the range of D10 being at least 50% of D5 and D90 being no more than 150% of D50).

Alternately, it can be interpreted that Moriuchi et al. does not specifically define an aspect ratio. In this case Matsumoto et al. teaches a lithium cobalt oxide material as a positive electrode material for a secondary battery (abs). Matsumoto et al. goes on to teach that fine particles are joined to make spherical or elliptically spherical particles (spherical particles have an aspect ratio of 1/1, as their width and length would both be the diameter of the particle). The motivation for using spherical particles in a positive electrode is that it improves electric conductivity and packing properties, which leads to

increased discharge capacity and improvement in maintaining a rate in discharge capacity (col. 4, lines 43-60). Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to make the particles in Moriuchi et al. spherical (having an aspect ratio of 1/1), as taught by Matsumoto et al. in order to improve electric conductivity, packing properties, discharge capacity, and rate in discharge capacity.

3. Claims 3, 5, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriuchi et al., Nakamura et al., and Matsumoto et al. (as applied to claim 1) in further view of US 2001/0010807 (Matsubara).

As to claim 3, Moriuchi et al. teach that the mean particle size (D50) of the first particle is 7-13 μm (abs). However, Moriuchi et al. does not disclose the surface area and press density of the positive electrode active material.

Matsubara discloses a lithium nickel cobalt oxide as the active material of a positive electrode for a rechargeable battery. The electrode active material has a specific surface area of 0.1 to 2 m^2/g (which overlaps the range that is claimed in the instant application) and an average particle size of 5 to 30 μm (para 0026). The particle sizes are such that 10% of the particle size distribution is 0.5D and 90% is 2D or lower (with D being the average particle size) (para 0017). Th e press density is between 1 to 4 g/cm^3 (which overlaps the range that is claimed in the instant application) (para 0056). It has been held that when the difference between a claimed invention and the prior art is the range or value of a particular variable, then a prima facie rejection is properly established when the difference in the range or value is minor.

Titanium Metals Corp. of Am. v. Banner, 778 F.2d 775, 783, 227 USPQ 773, 779 (Fed. Cir. 1985). Generally, differences in ranges will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such ranges is critical. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In re Hoeschele, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969).

Due the fact that similar materials having similar material characteristics are used by the Matsubara piece and the instant application (as well as the Moriuchi et al. piece), the half value width of the diffraction peak on (110) plane at $2\theta=66.5\pm1°$ from 0.07 to 0.14° is inherent. Furthermore, Matsubara teaches that the press density of the active material is important in that it decreases the moving distance between the particles and accelerates the crystal growth of the material (para 0057). The motivation for having a high surface area is to maximize surface area of the active material, and the motivation for having a high press density is decrease the moving distance between the particles. Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the lithium cobalt oxide material of Moriuchi et al. to include having a surface area ranging from 0.3 to 0.7 m^2/g and a press density 3.1 to 3.4 g/cm^3 as claimed in the instant application and taught within the ranges of by Matsubara in order to increase the density of the material to achieve higher capacity battery with an high charge/discharge rate.

As to claim 5, Moriuchi et al. does not teach the press density of either the first or second particles. However, Matsubara teaches a lithium/nickel/cobalt composite oxide

for a cathode active material (title). The press density given for the product is between 1-4 g/cm^3 (which encompasses the ranges for both the first and second particles as claimed by the instant application 2.9-3.2 g/cm^3 and 2.7- 3.1 g/cm^3, respectively) (para 0056). It has been held that when the difference between a claimed invention and the prior art is the range or value of a particular variable, then a prima facie rejection is properly established when the difference in the range or value is minor. Titanium Metals Corp. of Am. v. Banner, 778 F.2d 775, 783, 227 USPQ 773, 779 (Fed. Cir. 1985). Generally, differences in ranges will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such ranges is critical. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In re Hoeschele, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969).

Furthermore, Matsubara teaches that the press density of the active material is important in that it decreases the moving distance between the particles and accelerates the crystal growth of the material (para 0057). The motivation for having a high press density is decrease the moving distance between the particles. Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the lithium cobalt oxide material of Moriuchi et al. such that it has a press density within the range taught by Matsubara in order to increase the density of the material to achieve higher capacity battery with an high charge/discharge rate. (Note: This press density range taught by Matsubara would be obviated for both particles used by Moriuchi et al., because both materials are included within the positive

active material and would thus be subjected to the same pressing, thus making it a necessity that their press densities are within a range close to one another.)

As to claim 22, Moriuchi et al. teach that the mean particle size (D50) of the first particle is 7-13 μm (abs). However, Moriuchi et al. does not disclose the press density of the positive electrode active material.

Matsubara discloses a lithium nickel cobalt oxide as the active material of a positive electrode for a rechargeable battery. The electrode active material has a an average particle size of 5 to 30 μm (para 0026). The particle sizes are such that 10% of the particle size distribution is 0.5D and 90% is 2D or lower (with D being the average particle size) (para 0017). The press density is between 1 to 4 g/cm^3 (which overlaps the range that is claimed in the instant application) (para 0056). It has been held that when the difference between a claimed invention and the prior art is the range or value of a particular variable, then a prima facie rejection is properly established when the difference in the range or value is minor. Titanium Metals Corp. of Am. v. Banner, 778 F.2d 775, 783, 227 USPQ 773, 779 (Fed. Cir. 1985). Generally, differences in ranges will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such ranges is critical. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In re Hoeschele, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969).

Furthermore, Matsubara teaches that the press density of the active material is important in that it decreases the moving distance between the particles and accelerates the crystal growth of the material (para 0057). The motivation for having a

high surface area is to maximize surface area of the active material, and the motivation for having a high press density is decrease the moving distance between the particles. Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the lithium cobalt oxide material of Moriuchi et al. to include having a press density 3.1 to 3.40 g/cm^3 as claimed in the instant application and taught within the ranges of by Matsubara in order to increase the density of the material to achieve higher capacity battery with an high charge/discharge rate.

Response to Arguments

4. Applicant's arguments filed October 2, 2007 have been fully considered but they are not persuasive.

Applicant argues that Moriuchi et al., Nakamura et al., and Matsubara et al., alone or in combination fail to disclose or suggest the constitution of the present invention wherein a lithium-cobalt composite oxide (first particles) having a predetermined particle size distribution and a lithium-cobalt composite oxide (second particles) filling the space among the lithium-cobalt composite oxide (first particles) are mixed in a predetermined ratio to form a mixture.

Examiner respectfully disagrees. The abstract of Moriuchi et al. discloses two differently sized Li-Co composite oxide particles that are mixed in a certain ratio. Therefore, this mixture has particle filling the voids of the second particle. Moriuchi et al. mentions a size distribution regarding D10 and D90 of a first particle, as seen in para 0024 (see rejection of claim 1). Some of the claimed ranges of D10 and D90 fit the

claimed comparison to D50. Furthermore, an alternate interpretation was also applied to the fact that not all of the range taught by Moriuchi et al. fit the claimed size distribution. Nakamura et al. was used to obviate the size distribution. Applicant provides no argument at this point as to why the combination is not proper, so the rejection of record stands.

Applicant argues that Moriuchi et al., Nakamura et al., and Matsubara et al. alone or in combination do not disclose or suggest that the first particles are large particles (a) having an average particle size of D50 from 7 to 20 μm, and the second particles are small particles having an average particle size from 10 to 30% of D50 of the first particles, and (b) wherein an aspect ratio of the first particles is from 2/1 to 1/1.

Examiner respectfully disagrees. With respect to (a), the abstract of Moriuchi et al. disclose such characteristics. There are two particles, one with a mean size (D50) of 7-13 μm (first particle) (covers most of the claimed range of 7 to 20 μm). Furthermore, there is a smaller particle disclosed as well, having a mean particle size between 1-6 μm (second particle). Some of these particles fall in the 10 to 30% recitation of the D50 of the first particles. An example is shown below:

Example 1: First particle D50 – 10 μm; Second Particle – 3 μm

$$\frac{3}{10} * 100\% = 30\%$$

Therefore, for at least this example, the second particle has an average particle size of the D50 (average particle size) of the first particle.

With respect to (b), the new limitation is addressed by inherency/expectation of a spherical particle (equates to an aspect ratio of 1/1), as found in paragraph 0023 of

Moriuchi et al. (elaborated within the rejection). Furthermore this limitation has also been obviated using Matsumoto et al. in an alternate interpretation. This teaching can be seen in full within the rejection.

Applicant argues that Moriuchi et al., Nakamura et al, and Matsubara et al. fail to disclose nor suggest the technical concept of realizing a compacted dense structure and a large volume capacity density and press density by using the positive electrode active material having such constitution.

Examiner respectfully disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the concept of realizing a compacted dense structure and a large volume capacity density and press density by using the positive electrode active material having such constitution) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, although this concept is taught by Applicant, such a concept does not affect the scope of the claim. Applicant has not shown how the claimed invention is different than that of the combination of Moriuchi et al., Nakamura et al., Matsubara et al., and Matsumoto et al.

Applicant argues that limiting the aspect ratio of the particles distinguishes the instant application from Moriuchi et al. since there is no aspect ration in Moriuchi et al.

Examiner respectfully disagrees. The particles in Moriuchi et al. do have an aspect ratio, as all particles do. Moriuchi et al. does not explicitly define the aspect

ratio. However, the new limitation is addressed by inherency/expectation of a spherical particle (equates to an aspect ratio of 1/1), as found in paragraph 0023 of Moriuchi et al. (elaborated within the rejection). Furthermore this limitation has also been obviated using Matsumoto et al. in an alternate interpretation. This teaching can be seen in full within the rejection.

Applicant argues that Moriuchi et al. only teaches particles sizes of the large particles and the small particles, whereas the instant application recognizes the large particle size, the large particle size distribution, the large particle aspect ratio, and the second particle size.

Examiner respectfully disagrees. Moriuchi et al. teaches both of the particle sizes, as admitted by Applicant. Furthermore, Moriuchi et al. at least suggests a D10 and D90 size compared to the average first particle size (D50), as was pointed out by examiner in the rejection (see para 0024). Furthermore, this aspect is also obviated using Nakamura et al. when given the fact that Moriuchi et al.'s entire specified range did not fit the claim. The new limitation of the aspect ratio is addressed by inherency/expectation of a spherical particle (equates to an aspect ratio of 1/1), as found in paragraph 0023 of Moriuchi et al. (elaborated within the rejection). Furthermore this limitation has also been obviated using Matsumoto et al. in an alternate interpretation. This teaching can be seen in full within the rejection.

Applicant notes new claim 22.

Examiner would like to note that the claim has similar limitations to claim 3. It has been rejected in a similar fashion

Applicant argues that Nakamura et al. does not cure the defects of Moriuchi et al. (with respect to particle size distribution).

Examiner respectfully disagrees. As listed in the rejection, at least one chosen value of one exemplified of D90, D50, and D10 values of Moriuchi et al. fit the claimed size distribution. In totality, some of Moriuchi et al.'s size distribution falls outside the range of the size distribution claimed (it is larger). Nakamura et al. teaches a narrow particle size, thus motivating one of ordinary skill in the art to pick narrower size distribution ranges (tending towards those taught by the claimed invention). Applicant does not argue how the combination of Moriuchi et al. and Nakamura et al. is not combinable. In light of the reasoning provided above, the rejection of record stands.

Applicant argues: (a) that Moriuchi et al., Nakamura et al., and Matsubara et al., neither disclose nor suggest the constitution of the present invention wherein a lithium-cobalt composite oxide (first particles) having a predetermined particle size distribution and a lithium-cobalt composite oxide (second particles) filling the space among the lithium-cobalt composite oxide (first particles) are mixed in a predetermined ratio to form a mixture and (b) that that Moriuchi et al., Nakamura et al, and Matsubara et al. fail to disclose nor suggest the technical concept of realizing a compacted dense structure and a large volume capacity density and press density by using the positive electrode active material having such constitution.

Although these arguments have already been addressed, Examiner will iterate the position taken for clarity.

With respect to (a), the abstract of Moriuchi et al. discloses two differently sized Li-Co composite oxide particles that are mixed in a certain ratio. Therefore, this mixture has particle filling the voids of the second particle. Moriuchi et al. mentions a size distribution regarding D10 and D90 of a first particle, as seen in para 0024 (see rejection of claim 1). Some of the claimed ranges of D10 and D90 fit the claimed comparison to D50. Furthermore, an alternate interpretation was also applied to the fact that not all of the range taught by Moriuchi et al. fit the claimed size distribution. Nakamura et al. was used to obviate the size distribution. Applicant provides no argument at this point as to why the combination is not proper, so the rejection of record stands.

With respect to (b), although this concept is taught by Applicant, such a concept does not affect the scope of the claim. Applicant has not shown how the claimed invention is different than that of the combination of Moriuchi et al., Nakamura et al., Matsubara et al., and Matsumoto et al. Additionally, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the concept of realizing a compacted dense structure and a large volume capacity density and press density by using the positive electrode active material having such constitution) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that it is impossible to obtain a positive electrode active material as taught by the instant application by the combined teaching of Moriuchi et al., Nakamura et al., and Matsubara et al. (ie having a predetermined particle size and particle size distribution) and points to comparison of examples 1-5 to demonstrate this.

Examiner respectfully disagrees. Applicant has not provided proof as to why the combined teaching of Moriuchi et al., Nakamura et al., Matsubara et al., and now Matsumoto et al. would not reasonably exhibit the same characteristics as the claimed invention. The comparisons shown in table 1 are taken from Applicant's own disclosure and fail to compare Applicant's disclosure to the combined teaching of Moriuchi et al., Nakamura et al., Matsubara et al., and now Matsumoto et al. Furthermore, it is noted that nowhere is a certain volume capacity claimed. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a large volume capacity) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that Moriuchi et al., Nakamura et al., and Matsubara et al. do not disclose or suggest a press density of the lithium-cobalt composite oxide from 3.1 to 3.4 g/cm^3 as claimed in claim 22.

Examiner respectfully disagrees. As note before, the press density limitation has been claimed in claim 3 in combination with other characteristics. It is rejected in a similar manner being obviated Matsubara et al. Since the combination of Matsubara et

al. with Moriuchi et al. is not argued, the obviousness rejection of record made is upheld with respect to claim 3 and is made with respect to claim 22.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugenia Wang whose telephone number is 571-272-4942. The examiner can normally be reached on 7 - 4:30 Mon. - Thurs., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gregg Cantelmo

EW

GREGG CANTELMO
PRIMARY EXAMINER